CHAPTER 1

OVERVIEW OF PHASE II OF THE CLI

This chapter describes the goals, structure, processes, and activities of Phase II of the Consumer Labeling Initiative (CLI). Phase I of the CLI included qualitative research to investigate consumer comprehension and satisfaction with product labels for indoor insecticides, outdoor pesticides, and household cleaners¹. Phase II, begun in October 1996, involved a more in-depth investigation of label information and consumer satisfaction, comprehension and preference for these product labels.

During Phase I, recommendations were made regarding the following topics:

- # label changes that could be implemented immediately. Announced in September 1997, these included using the headings First Aid and "other ingredients";
- # further improvement to labels that could be made, but that would require additional quantitative research to investigate how to make these improvements;
- # gaining an understanding of consumers' comprehension of and preference for current labels on household cleaning products, indoor insecticides, and outdoor pesticides;
- # addressing consumer needs for better information about specific issues, such as ingredient and storage and disposal information; and
- # creating a consumer education campaign to inform consumers about the importance of reading product labels carefully.

¹ For a complete list of all the product types that are covered under the CLI, please refer to Appendix 1-1.

Focus of Phase II

The Environmental Protection Agency's (EPA) commitment to Phase II of the CLI was announced in a September 1997 press briefing by EPA Assistant Administrator, Lynn Goldman. Phase II focused on the following issues:

- # finding simpler, clearer ways to word advice concerning an accident or emergency involving household products;
- # initiating a multi-faceted, broad-based education campaign to help consumers understand and use labels effectively, and to disseminate information about future labeling changes;
- # investigating further issues regarding storage and disposal information, with the goal of resolving conflicts among product labels and laws, ordinances, and community practices for recycling and disposal of waste;
- # conducting in-depth research to determine baseline consumer understanding, attitudes, behavior, and satisfaction about these types of product labels; and
- # conducting research to determine what ingredient information consumers want and need on labels for pesticides and other household products.

CLI Participants and Their Roles

The CLI is a voluntary initiative that depends upon extensive Stakeholder participation. The many Stakeholder groups involved in the CLI have included: consumer product manufacturers; retailers; marketers; trade associations; environmental labeling program practitioners; government (federal, state, and local) agencies, including non-U.S. government agencies; EPA Partners; academics; public interest groups; consumer groups; environmental groups; health and safety professionals; standard-setting organizations; media groups; interested companies; and individual citizens.

All Stakeholders with an interest in labeling issues concerning consumer products have been encouraged to participate. Stakeholders have been actively involved in project planning, implementation, review, and comment. Stakeholders have provided particularly valuable input in identifying possible deficiencies in current labels and in suggesting options for changes to EPA programs not directly related to product labels. Individual consumers also participated in qualitative and quantitative aspects of the research.

Role of the EPA

The EPA staff directed the project and worked with Stakeholders on all aspects of the CLI, oversaw the qualitative research, and prepared the Phase I and Phase II reports. After considering the input from Task Force members and CLI Partners, the EPA made certain decisions and recommendations about some policy questions and issues that arose during the project. Dissenting opinions were always invited, and a wide diversity of viewpoints is reflected in the findings.

Role of the CLI Task Force Members

The CLI Task Force was created by the EPA to provide direction for the initiative. The Task Force consisted of federal, state, and other regulatory entities that have expertise and/or interest in labeling issues. The Task Force helped to determine the overall direction of the project, provided input on the development of the research plan, shared labeling-related experience and knowledge, and participated in the design and execution of the CLI research. Appendix 1-2 includes the complete list of Task Force members.

Role of EPA Partners

After the Task Force was set in motion, the EPA invited all interested entities and individuals to become "CLI Partners" and participate regularly and on a long-term basis in the CLI. In Phase II, the Partners worked on, and were crucial to, the design, testing, and execution of qualitative and quantitative research; funded quantitative research; provided information sources for the literature review; reviewed sections of this report; and donated their considerable experience and expertise to the research process. The active CLI Partners included a number of businesses holding significant market shares of these product categories, and trade associations related to manufacturing and distributing indoor insecticide, outdoor pesticide, and household cleaner

products. Partners also helped to disseminate information on the CLI to their members and colleagues. They also assembled and organized comments and ideas from their membership for presentation to the EPA. Appendix 1-3 lists the CLI partners.

Stakeholder Outreach

Success of the CLI required the involvement of many project Stakeholders. Over the course of both phases of the CLI, hundreds of individuals and organizations expressed interest in the initiative. These Stakeholders included consumer advocacy groups, environmental groups, consumers, health and safety professionals and organizations, international groups, government agencies, manufacturers of consumer household products, and retailers (for a listing of CLI Stakeholders, please refer to Appendix 1-4). The CLI Partners attempted to identify the particular interests of individual Stakeholders and the most effective ways to communicate with and learn from them. Communication methods that were utilized to identify and communicate with Stakeholders included the following:

- # press conferences and public announcements for all important milestones in the CLI, such as the Phase I and Phase II recommendations;
- # public meetings, announced and publicized several months in advance, at which Stakeholder feedback was actively sought;
- # news releases;
- # publication and dissemination of CLI informational memos to EPA staff, Partners, Task Force Members, subgroup members, and other participants;
- # publication and dissemination of consumer-oriented CLI "Updates" to all parties that had expressed interest;
- # posting of all published materials on the CLI website, in a form that could be downloaded or printed online;
- # publication of the names, telephone numbers, and e-mail addresses of CLI project leaders at the EPA:
- # active encouragement of participation by new Stakeholders;
- # identification of important points for feedback on the CLI process and content;
- # solicitation of written comments on public notices printed in the *Federal Register*; and
- # informational meetings of Stakeholders with the EPA management and staff.

Other Participants in the CLI

Other businesses that participated in the CLI included:

- # Abt Associates Inc., which, under contract to EPA, in Phase I reviewed the literature and Stakeholder comments and wrote the Phase I report; and in Phase II coordinated work of many participants, as well as performed research, helped to develop questions for the quantitative research, and wrote the Phase II report;
- # Macro International, which, under contract to EPA, conducted the qualitative research in Phase I, and the First Aid one-on-one interviews in Phase II;
- # The Newman Group, Ltd., which, under contract to EPA, performed the qualitative survey research in Phase II; and
- # National Family Opinion Research (NFO), which, under contract to one or more CLI Partners, performed the quantitative survey research in Phase II.

The Process of Phase II

At the close of Phase I, it was decided that in-depth quantitative research was needed to further investigate consumer understanding, preference, and satisfaction with current product labels. Additional information was needed on specific topics such as First Aid, ingredient information, precautionary statements, direction for use, storage and disposal instructions, consumer education, and standardized environmental information on product labels. Smaller subgroups of Partner and Task Force members were established to develop the quantitative research and to address these specific topics.

Throughout the course of Phase II, subgroups worked both separately and together. Information from quantitative and qualitative research was incorporated into decisions made by different subgroups. Similarly, knowledge provided by various subgroup members was taken into consideration when developing the quantitative and qualitative research; although, in one case, an omission led to inconclusive data. For example, the Storage and Disposal Subgroup shared information with the Consumer Education Subgroup in preparation for the Consumer Education Campaign. Another example of this interaction is that the quantitative mail survey questionnaire included questions about consumers' storage and disposal practices.

The History of Phase II

Phase II of the CLI began in **October 1996**. Between then and February 1997, Stakeholders involved in CLI engaged in planning and preparation activities. The group formally adopted and initiated a joint strategy for Phase II during the **March 1997** CLI "kick-off" Partner and Task Force meeting. At this meeting the proposal for the Phase II quantitative research was presented and Partner and Task Force members gave their support for the research plan and development. It was announced at this meeting that EPA would be unable to fund any quantitative research, given the magnitude of the project. Company and trade association partners felt very strongly that such research would be vital for producing sound recommendations for label improvement, and they voluntarily undertook to jointly fund and direct a quantitative research program that would involve all of the CLI project participants. Interim label improvements arising from the Phase I research were also announced at this meeting, as were policy initiatives such as standardizing label information. Finally, preliminary ideas for a consumer education campaign were discussed at this meeting.

In **April 1997**, the EPA met with environmental and public interest groups, and other interested parties, to bring them up to date on the CLI project and to introduce to them the quantitative research plan, interim label changes, policy initiatives, and consumer education project. Environmental and public interest groups were invited to actively participate in all aspects of the development of Phase II.

After initiation of Phase II, a media event was held in **September 1997**. The Assistant Administrator of EPA's Office of Prevention, Pesticides and Toxic Substances (OPPTS), Lynn Goldman, announced the immediate label changes that resulted from Phase I of CLI. These included: inclusion of a toll-free number on labels so that consumers could call someone in case of emergencies, use of common names for ingredients instead of chemical names, encouraging companies to use "other ingredients" instead of "inert ingredients," simple first aid instructions,

and changing the heading for these to read "First Aid." It was also announced that in Phase II a fuller investigation of the ingredients issues (i.e., right-to-know issues), and storage and disposal issues would take place. Finally, the initiation of the quantitative research and the development of the consumer education efforts were announced at this media event.

In **February 1998**, the entire CLI Partner and Task Force met in Alexandria, VA. At that meeting, the various subgroups gave status updates of the work they had done up to that point. Development of the quantitative consumer research was well under way and the research Core Group updated the rest of the Partner and Task Force members on the research methodology, questionnaire development, and research implementation. The EPA's Deputy Assistant Administrator for the Office of Prevention, Pesticides and Toxic Substances, Susan Wayland, asked Partner and Task Force members to begin investigating the feasibility of including standardized environmental information on product labels of household cleaners, indoor insecticides, and outdoor pesticides.

Implementation of the (national) quantitative survey began in **April 1998** with screening for participants and ended in **June 1998**. Results from the quantitative research were tabulated in several volumes of raw data. Relevant data were shared with the various subgroups (e.g., information about consumers' sources of information was shared with the Consumer Education Subgroup), to gain feedback and interpretation of the data from the subgroup. The data were analyzed by the research Core Group. This group met several times via conference calls and face-to-face meetings throughout the months of July and August to interpret and analyze the data in order to develop findings and implications.

During **June 1998**, while the quantitative research was coming to a close, a small subset of the Research Core Group was formed to address the Phase I charge of investigating standardized environmental information on product labels. It was decided that qualitative consumer research would be the best way to find out what types of environmental information consumers want to see on labels. At this point, results from the quantitative research were beginning to materialize, and they showed that, by and large, consumers did not consider environmental information to be one of the more important parts of product labels. Instead, they indicated that standardized label formats would be useful for increasing consumer comprehension of label information. The Core Group's focus, therefore, shifted: the qualitative research, used to enhance the findings from the quantitative research, would also be used to investigate consumer preference for standardized label formats.

Qualitative research took place during **July and August 1998**. Results from the research were incorporated into the overall conclusions from Phase II. The findings, implications, and conclusions of both the quantitative and qualitative research were presented to the entire CLI Partner and Task Force on the first day of the Partner and Task Force meeting in Washington, DC, in **September 1998**. Subgroups also presented the work they had done since the February meeting. During the second day of the meeting, CLI Partner and Task Force members made recommendations to the EPA for potential next steps (beyond Phase II) for CLI.

In **April 1999**, the EPA held another Partner and Task Force meeting in Alexandria, VA, to update CLI participants on steps that had been taken since, and in response to, the recommendations made at the September meeting. The CLI recommendations were considered by the EPA. The EPA's Office of Pesticide Programs (OPP) announced how it intended to



Research in Phase II

First Aid Qualitative Research

Phase II began by addressing the issues relating to First Aid information on product labels. The qualitative research in Phase I found that the consumers tested often referred to the First Aid section on labels only in the event of an emergency or accident. When prompted to read the text during the qualitative survey, however, many of these consumers reported that the phrases on labels that tell them what to do in these types of situations were confusing.

During Phase I, CLI Stakeholders had recommended that one of the goals for Phase II of CLI be to find simpler, clearer ways to provide instructions to consumers about what to do in case of an emergency or accident. In accordance with this goal, the phrase "Statement of Practical Treatment" was replaced by "First Aid." Furthermore, CLI Stakeholders worked with the EPA's OPP to update and improve First Aid statements. The CLI team made a decision, based on previous research, to replace the word "physician" with "doctor" and "area of contact" with "skin."

During Phase II, qualitative consumer research was conducted on a series of proposed First Aid statements, to assess the potential for changing, simplifying, and clarifying these statements. In July of 1997, the CLI conducted 23 follow-up interviews with consumers to test several proposed wordings of First Aid statements. (See Chapter 5 for a full description of the Qualitative First Aid research.) First Aid instructions for all combinations of the Federal Insecticide, Fungicide, and Rodenticide Act's (FIFRA's) toxicity categories and hazard indicators were tested. The Office of Pesticide Programs (OPP) proposed an initial set of First Aid statements, with input from industry, the American Poison Control Center, and other CLI Partners and Stakeholders.

Based on the results of these consumer interviews, the EPA revised the First Aid statements. CLI Partners, Task Force members, and Stakeholders, such as the American Red Cross, PPDC, and academia, commented and gave their feedback on these revisions. The statements were subsequently revised one final time, taking all of the feedback into account. The final revisions to the First Aid statements are expected to be released in an OPP *Pesticide Registration (PR)* notice in Fall/Winter 1999. See Chapter 5 for a detailed discussion of the First Aid qualitative research.

Quantitative Consumer Research

Phase I research yielded qualitative results about the circumstances under which consumers read product labels, which parts of labels they pay the most attention to, and satisfaction about current label information and format. Since the qualitative research could not provide quantifiable results, the CLI used quantitative research in Phase II for this purpose.

The quantitative research was a major component of Phase II of the CLI. The research was funded by several CLI industry Partners. The development of the quantitative research, including questionnaire development, was a collaborative group effort involving industry Partners, EPA personnel, Task Force members from the EPA and other federal agencies, (e.g., the (Consumer Product Safety Commission (CPSC), and the Food and Drug Administration (FDA)), as well as other interested CLI Stakeholders. The industry Partners hired an independent market research

and polling firm, National Family Opinion (NFO), to conduct the survey. The study design team took direction from the results of the CLI Phase I research, including the many public comments received, as well as input from the various CLI Subgroups (see discussion below) that were meeting at the same time as the survey was being developed and implemented.

The quantitative research consisted of a national survey of consumers. The survey aimed to:

- # collect more data from consumers about potential new label formats and wording changes;
- # benchmark and study current consumer practices and preferences with regard to product labels, to help the CLI determine what other label changes are appropriate and how best to make them;
- # provide information to help the EPA and CLI Project partners consider policy implications and take some immediate actions;
- # assess consumer ability to locate label information;
- # measure consumer comprehension of labels; and
- # provide demographic analysis capability.

The survey was conducted during May and early June 1998. Survey results were analyzed during the Summer of 1998. The survey included questions about how consumers locate label information, how well consumers understand the information, when and where they consult the labels, the relative importance of different kinds of label information, and which information consumers wish to find most quickly. The quantitative portion of the study included both a mailed, written survey instrument and a telephone interview. The study was designed to include a fair representation of low-income, low-education, and ethnic minorities in the U.S. See Chapter 2 for a detailed discussion of the survey research design, implementation, and results.

Qualitative Consumer Mini Focus Groups

The qualitative research performed in Phase I, backed by Stakeholder comments and the literature review, found that while generally satisfied with the labels, many consumers do not consistently read or understand product labels for household pesticides, insecticides, and hard surface cleaners. This finding was also supported by Phase I Stakeholder comments and the Phase I literature review. Possible reasons that were proposed for this finding included:

- # excessively technical and sometimes obscure wording of information on labels;
- # poor layout and design of information, with inadequate contrast and difficult-toread type;
- # information that does not address consumers' needs;
- # consumers' lack of understanding of the potential benefits of reading the label information;

- # consumers' lack of motivation to read labels; and
- # general consumer satisfaction with the existing level of information on labels.

Quantitative survey techniques, including those used in Phase II quantitative research, do not lend themselves well to detailed probing of interviewees to uncover why and how they react to a variety of different text phrasings and formats. The CLI felt that a more subjective approach would enlighten certain areas of inquiry. The CLI, therefore, pursued further qualitative research in Phase II to investigate:

- # consumer understanding of where to locate information on product labels;
- # consumer understanding of the meaning of specific phrases;
- # possible alternatives to the way certain label information is stated;
- # how labels can be more clearly designed;
- # consumer interpretation of certain "signal" words, such as DANGER;
- # consumer reactions to the possibility of standardizing label information;
- # consumer reactions to possible logo designs for the Consumer Education Campaign; and
- # compelling motivators for reading and understanding labels.

Qualitative research was funded by the EPA, which hired The Newman Group, Ltd. to conduct the research. The qualitative research took the format of 27 "mini" focus groups, each consisting of 3 to 5 participants, who were purchasers and users of the products under consideration. Nine focus groups were held in each of three cities, Chicago, IL; Ft. Lauderdale, FL; and Dallas, TX, during July and August of 1998. In each city, hard surface cleaners, indoor insecticides, and outdoor pesticides were each covered by three separate focus group discussions. A strong effort was made to represent low-income, less-educated, and minority-group segments of the populations of each city.

See Chapter 3 for a detailed discussion of the Phase II qualitative research design, implementation, and results.

CLI Subgroup Activities

The CLI was envisioned from the beginning as a partnership and a process involving teamwork among many Stakeholders. Phase II of the CLI had several different focuses, each of which required the expertise of different EPA management and Stakeholders. Subgroups concentrated on each of the following areas:

- # research on consumer knowledge, attitudes, and behaviors related to labeling information;
- # standardized environmental information;
- # storage and disposal information on products; and
- # consumer education related to label awareness and use.

Members of each subgroup consisted of CLI Partners, Task Force members, EPA, other federal agency personnel, and other interested CLI Stakeholders. Each subgroup made efforts to keep other CLI groups informed of all significant activities and findings. Subgroup members were responsible for collaborating with others in their subgroup and conveying information from the subgroup meetings to people in their own organizations. Subgroups provided information to the group developing and implementing the quantitative and qualitative research. Input from subgroups was instrumental in survey development, analysis of the survey results, and formulation of the Phase II recommendations. In many ways, the work of each subgroup affected that of the others, and the CLI has been a dynamic process of teamwork among the many Stakeholders.

Quantitative and Qualitative Research Core Group

A group of 22 CLI Stakeholders volunteered their time and expertise to coordinate the quantitative and qualitative research of Phase II. Members included key people from the EPA, market researchers from Amway Corporation, Bayer Corporation, the Chemical Specialties Manufacturers Association (CSMA), Procter and Gamble, Reckitt and Colman, The Clorox Company, Monsanto Lawn and Garden, S.C. Johnson and Son, Inc., RISE (Responsible Industries for a Sound Environment), the Consumer Product Safety Commission (CPSC), and the Food and Drug Administration (FDA). Appendix 1-5 lists all the Core Group members who were involved primarily with the quantitative research.

The group met on a weekly basis via conference calls to develop and refine questions for the quantitative survey instruments (telephone and mail survey). The market researchers from the companies were experts in their field and were able to provide input on the types of questions and question formats that would be appropriate for each product category. The group worked together to formulate questions addressing consumer understanding, preference, and satisfaction with current labels. Additional questions were asked regarding specific topic areas, such as ingredient information. (See Chapter 2 for a full description of the quantitative research.)

The Core Group also developed the focus and questions for the qualitative research and helped familiarize The Newman Group, Inc. with the CLI and its goals and objectives. Members of the Core Group observed several of the qualitative focus groups and provided feedback after each group on ways in which the moderator might be better able to convey the ideas being tested in subsequent focus groups. Appendix 1-6 lists all the members of the Qualitative Subgroup.

Finally, after the quantitative and qualitative research was completed, a small subset of the Core Group (consisting of market researchers [one each from Amway Corporation, Bayer Corporation, The Clorox Company, Procter and Gamble, and S.C. Johnson and Son, Inc.] and three EPA Task Force members), continued to meet on a weekly basis to interpret and analyze the survey results. This group studied the data thoroughly, and formulated findings, implications, and conclusions. (See Chapters 2, 3 and 4 for a complete discussion of the findings, implications, and conclusions from the quantitative and qualitative research.)

Standardized Environmental Information on Product Labels Subgroup

A small working group consisting of EPA personnel and industry Partners was formed to address the issue of standardized environmental information on product labels. The group initially met regularly; as the scope of this issue changed, the group also met with the research Core Group. Appendix 1-7 lists all the members of the Standardized Environmental Information Subgroup.

Initially, the group set out to investigate the possibility of developing standardized information on product labels in the form of a facts box of environmental information (analogous to the food nutrition label). Based on input from this working group and the desire of the Agency to advance the development of this concept and frame the debate, consumer research on standardizing environmental information was performed as part of the quantitative research. Part of the quantitative research asked consumers what they felt was the most important information on a label and to identify which types of information they looked for in different situations. The quantitative research found that consumers interviewed did not generally consider environmental information to be one of the more important sections of the product labels. Consumers also said that a standardized format for labels would help them to more easily locate the information that they consider to be important.

The group's focus regarding standardization of information on product labels then shifted. Given what consumers were saying, the group decided that it was most important to test variations of standardized formats on product labels to see whether any of the formats improved consumers' understanding of label information. It was decided that various box and standardized label formats would be tested via the qualitative research. Consumers in the focus groups were asked questions about their preference for specific formats, whether the formats made a difference in their understanding of the information presented, and whether they had a preference for which *information* should be presented in standardized or box formats.

See Chapter 6, section 1 for a more details regarding the standardized format research.

Storage and Disposal Subgroup

The Storage and Disposal Subgroup was formed at the end of Phase I to address some of the key findings from Phase I research on storage and disposal issues. (The complete Storage and Disposal Subgroup is listed in Appendix 1-8.) These Phase I findings included the following:

- # consumers often do not read storage and disposal instructions;
- # consumers frequently attempt to recycle the empty plastic containers that hazardous household products come in, which often violates regulations relating to public health and safety; and
- # EPA standard disposal instructions on labels may conflict with some state or local laws or practices.

In Phase II, the CLI Storage and Disposal Subgroup directed research to obtain a better overview and understanding of current state and local regulations and practices regarding storage and disposal of household hazardous products. The Subgroup also identified problems related to modifying storage and disposal language on labels. An informal survey was made of members of the North American Hazardous Materials Management Association (NAHMMA). Telephone interviews, a literature review, and discussions with and presentations of data by a variety of Stakeholders supplemented the survey results. Input from the storage and disposal groups was also taken into consideration when formulating questions for the qualitative and quantitative research, and in the analysis of the research data.

See Chapter 6, section 2 for a detailed discussion of the Storage and Disposal Subgroup activities.

Consumer Education Subgroup

The ultimate goal of the CLI is to change the behavior of consumers regarding pesticides and household cleaning products, especially to:

- # increase reading and use of labels;
- # decrease the misuse of products;
- # decrease the incidence of accidents involving products; and
- # decrease environmental impacts caused by improper use, storage, and disposal of these products.

Phase I research and the extensive literature search, supported by many Stakeholder comments, found that many consumers do not consistently or thoroughly read labels for these types of products. Changes of label information or design will not be beneficial to consumers unless they read the labels. As part of Phase II, the CLI therefore established a Consumer Education Subgroup, to concentrate on ways to 1) increase consumer awareness of labels; 2) encourage consumers to read labels and use their information thoughtfully, for both their personal safety and as part of their environmental responsibility; and 3) to help people understand the information presented on labels. Appendix 1-9 lists all the members of the Consumer Education Subgroup.

The Consumer Education Subgroup conceptualized, developed, and began implementing a broad-based, long-range consumer education plan intended to help people to read, understand, interpret, and use label information. The Subgroup developed an easily understood message —"Read the Label *FIRST!*"— and began developing a unique, memorable, consumer-friendly logo of the message. The various components of the campaign were designed to work with and reinforce each other. The Subgroup also strategized the goals of the education campaign and support materials, and suggested ways in which to use the materials. The subgroup prepared brochures targeting different audience groups, and designed succinct messages that can be adapted to a variety of educational approaches and materials.

See Chapter 6, section 3 for a detailed discussion of the Consumer Education Campaign.